Taking the Pulse of COVID-19 in Saskatchewan—in 4 charts (August 2021)
Results from the Social Contours and COVID-19 Survey, Round 10
August 9, 2021

Vaccines and masks in Saskatchewan during the COVID-19 pandemic

From May 4th, 2020 (Phase 1 of the Re-open Saskatchewan Plan), SPHERU researchers have collected data about COVID-19 from Saskatchewan residents through Social Contours and COVID-19 Survey. This survey had four main objectives: (1) to collect behavioural, perceptual, social, and geographical data (i.e., how we act, think, interact, and move); (2) assign a COVID-19 risk level to people and places over time; (3) identify lower-risk and higher-risk areas in our province; and (4) communicate this information to public health officials and the general public.

Data below are based on Social Contours and COVID-19 study responses from January 1st, 2021, to May 3rd, 2021, post-vaccine rollout, which includes 3,585 respondents (unless otherwise indicated). Results are weighted by age, gender, and location of residence (Census 2016, Saskatchewan adult population). This brief focuses on the dual behaviour of mask-wearing and vaccine intention.

Key Takeaways

As Saskatchewan reopens with no mask mandates, what does the evidence say about the dual behaviour of mask-wearing and vaccine intent? The Social Contours and COVID-19 research provides the evidence. These results are particularly relevant as we see continuing upticks in case numbers in the province. Those who are hesitating or refusing vaccination and do not wear masks are at heightened risk for continuing to spread the virus and prolong COVID-19 in Saskatchewan.

- There is a clear relationship between vaccine intent and mask-wearing in the province. Specifically, those who refuse vaccines are, for the most part, the same individuals who do not wear masks in public indoor places.
- Those who engaged in more protective behaviour (e.g., seeing only a few people—less than 5—outside of their household) were more likely to wear masks consistently (defined as wearing ‘all the time,’ ‘most of the time,’ or ‘some of the time’) and accept vaccines versus those masking little/none of the time and reporting vaccine hesitance or refusal.
- Several regions (sub-zones) in the southwest corner of the province, as well as pockets in the southeast, show consistently high rates of masking little/none of the time and reporting vaccine hesitance/refusal. Even among those who mask consistently, these regions display higher vaccine hesitance and refusal rates than the rest of the province.
1. Mask-wearing and vaccine intention among adults in Saskatchewan

Since the vaccine rollout began in the province, those who are vaccine-hesitant and refuse vaccination are more likely to also not protect themselves with mask-wearing, as compared to those who already have received or will accept a vaccine. Those who hesitate are more than twice as likely to not wear masks (5% vs 2%) and those who refuse are 13 times more likely to not wear masks (26% vs 2%), compared to those who are vaccine-accepting.
2. How different behaviours correlate with wearing a mask consistently and accepting vaccine versus not wearing a mask and vaccine hesitance/refusal

Ten correlates—many of which were perceptual, and a few behavioural factors—were related positively to masking consistently and vaccine acceptance. In this forest plot, these correlates are shown in green dots. For example, those who said that they were very concerned about spreading the virus, compared to not concerned, were 18.9 times more likely to mask-up and to get a vaccine. In terms of an example of a behavioural correlate, those who reported not being in contact with anyone in the past week without social distancing were over 27 times more likely to mask and accept a vaccine, while those who were in non-socially distanced contact with 1-5 people were over 6 times more likely to mask consistently and accept a vaccine, compared to those who were in contact with more than 5 people during the past week.
3. Masking and vaccine acceptance vs no masking and vaccine hesitancy/refusal, by area of residence (sub-zones)

The map on the left shows those who said they wore masks consistently and had received or will get a vaccine. This choropleth map shows sub-zones with the highest one-third of those who masked and accepted vaccine in blue (82.7-100%), the middle third in yellow (66-82.6%), and lowest third in red (29-65%).

This map shows those who said they did not wear masks or only wore them a little of the time and also said they had or will refuse a vaccine or were hesitant. This choropleth map shows sub-zones with the highest one-third of those who said they hardly or didn’t mask and will not get a vaccine or were hesitant in red (4.6-36%), middle third in yellow (1.6-4.5%), and lowest third in blue (0-1.5%). As is evident, there is no overlap between the regions containing the highest one-third of either behaviour, meaning the sub-zones with highest proportion of masking and vaccine acceptance and highest proportion of no masking and vaccine hesitant/refusal are exclusive of each other.
4. Mask-wearing and vaccine intention, according to area of residence (sub-zones)

This map goes into greater detail than the two maps prior, showing the proportions of four different levels of mask-wearing and vaccine intentions within each provincial COVID-19 sub-zone. Each pie shows four coloured wedges: in pink, those who report both masking and vaccine accepting; in green, masking and vaccine-hesitant; in purple, masking and vaccine refusal; and in olive, no masking and either vaccine-hesitant or refusal. Across most sub-zones, most of the respondents wore masks consistently and were vaccine accepting; however, several subzones in the south/central-west show far higher rates of masking inconsistently and being vaccine refusal and hesitant than the rest of the province. Further, among those who mask consistently within these regions, there are similar rates of vaccine hesitancy and refusal.

For more Social Contours and COVID-19 Saskatchewan survey results:
https://spheru.ca/covid-19/socialcontours/covid-19-results.php

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